

Claims

- [c1] An imaging method for an MRI system comprising:
identifying at least one low signal region within a scanning volume;
generating an overlap calculation of said scanning volume;
substantially eliminating said at least one low signal region from said overlap calculation thereby generating an adjusted overlap structure; and
generating at least one SENSE calculation in response to said adjusted overlap structure.
- [c2] An imaging method as in claim 1 further comprising
generating a calibration scan of a scanning volume
thereby obtaining edge information.
- [c3] An imaging method as in claim 1 further comprising reconstructing an image of said scanning volume in response to said SENSE calculations.
- [c4] An imaging method as in claim 1 wherein generating at least one SENSE calculation in response to said adjusted overlap structure further comprises generating a SENSE scan responsive to said adjusted overlap structure; and

reconstructing an image of said scanning volume in response to said SENSE scan.

[c5] An imaging method as in claim 4 wherein reconstructing further comprises reconstructing using a full SENSE calculation.

[c6] An imaging method as in claim 4 wherein reconstructing further comprises blanking said at least one low signal region.

[c7] An imaging method as in claim 1 wherein identifying at least one low signal region within a scanning volume further comprises identifying at least one low signal region through a thresholding calibration scan.

[c8] An imaging method for an MRI system comprising:
generating a calibration scan of a scanning volume thereby obtaining edge information;
identifying low signal regions within said scanning volume;
generating overlap calculations of said scanning volume;
substantially eliminating said low signal regions from said overlap calculations thereby generating an adjusted overlap structure;
generating a SENSE scan responsive to said adjusted overlap structure; and

reconstructing an image of said scanning volume in response to said SENSE scan.

[c9] An imaging method as in claim 8 wherein reconstructing further comprises reconstructing using a full SENSE calculation.

[c10] An imaging method as in claim 8 wherein reconstructing further comprises blanking said low signal regions.

[c11] An imaging method as in claim 8 wherein identifying said low signal regions within said scanning volume further comprises identifying said low signal regions through a thresholding calibration scan.

[c12] An MRI system comprising:
a substantially cylindrical member defining a scanning bore;
a coil assembly mounted in said scanning bore and comprising a first coil, said coil assembly adapted to receive a scan signal, said coil assembly further adapted to generate an image signal in response to said scan signal;
an image reconstructor adapted to receive said image signal and reconstruct an image therefrom through logic adapted to: generate overlap calculations, substantially eliminate low signal regions from said overlap calculations thereby generating an adjusted overlap structure,

and generate SENSE calculations in response to said adjusted overlap structure; and
a scan controller adapted to generate said scan signal.

[c13] The system of claim 12 wherein said scan controller is further adapted to generate a calibration scan to identify low signal regions within said scanning volume and therefrom generate a calibration scan signal.

[c14] The system of claim 13 wherein said image reconstructor is further adapted to receive said calibration scan signal and substantially eliminate low signal regions from said overlap calculations in response thereto.